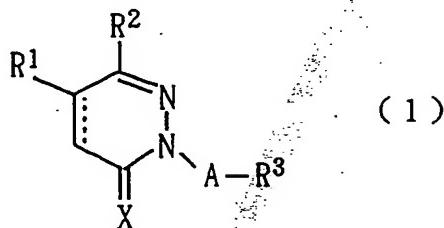


CLAIMS

1 1. A pyridazine derivative represented by the
2 following formula (1):

3



4 wherein R¹ represents a substituted or unsubstituted
5 aryl group, R² represents a phenyl group substituted at
6 least at 4-position by a lower alkoxy group, a lower
7 alkylthio group, a lower alkylsulfinyl group or a lower
8 alkylsulfonyl group, and optionally has one or more
9 substituents at the remaining positions, R³ represents
10 a hydrogen atom, a lower alkoxy group, a halogenated
11 lower alkyl group, a lower cycloalkyl group, a sub-
12 stituted or unsubstituted aryl group, a substituted or un-
13 substituted aryloxy group, a substituted or un-
14 substituted, nitrogen-containing heterocyclic ring
15 residue, a substituted or unsubstituted aminocarbonyl
16 group, or a lower alkylcarbonyl group, A represents a
17 single bond or a linear or branched lower alkylene
18 group or lower alkenylene group, X represents an oxygen
19 atom or a sulfur atom, and the dashed line indicates
20 that the carbon-carbon bond between the 4-position and

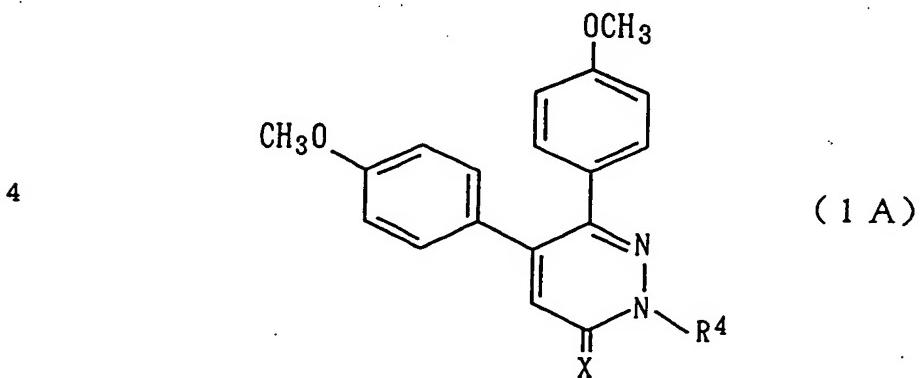
21 the 5-position is a single bond or a double bond, with
22 the proviso that A is a single bond when R³ is a
23 halogenated lower alkyl group and that the following
24 combinations are excluded: R¹ and R² are 4-
25 methoxyphenyl groups, X is an oxygen atom, the carbon-
26 carbon bond at the 4-position and the 5-position is a
27 double bond, A is a single bond, and R³ is a hydrogen
28 atom or a 2-chloroethyl group; or a salt thereof.

1 2. A pyridazine derivative or a salt thereof ac-
2 cording to claim 1, wherein R¹ represents a substituted
3 or unsubstituted phenyl or pyridyl group.

1 3. A pyridazine derivative or a salt thereof ac-
2 cording to claim 1, wherein R¹ represents a phenyl or
3 pyridyl group which may be substituted by 1 to 3 sub-
4 stituents selected from halogen atoms and lower alkoxy
5 groups; R² represents a phenyl group, which may be sub-
6 stituted at 4-position by a lower alkoxy group, a
7 lower alkylthio group, a lower alkylsulfinyl group or a
8 lower alkylsulfonyl group, and at the other positions
9 by 1 or 2 substituents selected from halogen atoms,
10 lower alkoxy groups, lower alkylthio groups, lower
11 alkylsulfinyl groups and lower alkylsulfonyl groups; R³
12 represents a hydrogen atom, a lower alkoxy group, a
13 halogenated lower alkyl group, a lower cycloalkyl
14 group, a phenyl, pyridyl or phenoxy group which may

15 be substituted by 1 to 3 substituents selected from
16 halogen atoms, lower alkyl groups, lower alkoxy groups,
17 carboxyl group, lower alkoxy carbonyl groups,
18 nitro group, amino group, lower alkylamino groups and
19 lower alkylthio groups, a substituted or unsubstituted
20 piperidino, piperidyl, piperazino or morpholino group,
21 a substituted or unsubstituted aminocarbonyl group, or
22 a lower alkylcarbonyl group; and A represents a linear
23 or branched lower alkylene group having 1 to 6 carbon
24 atoms or a linear or branched alkenylene group having 2
25 to 9 carbon atoms.

1 4. A pyridazine derivative or a salt thereof ac-
2 cording to claim 1, which is a compound represented by
3 the following formula (1A):



5 wherein R⁴ represents a linear or branched lower alkyl
6 or lower alkenylene group, a lower cycloalkyl group or a
7 lower cycloalkylmethyl group, and X represents an
8 oxygen atom or a sulfur atom; or a salt thereof.

1 5. A pyridazine derivative or a salt thereof ac-
2 cording to claim 1, which is 5,6-bis(4-methoxyphenyl)-
3 2-ethyl-2H-pyridazin-3-one, 5,6-bis(4-methoxyphenyl)-2-
4 methyl-2H-pyridazin-3-one, 5,6-bis(4-methoxyphenyl)-2-
5 isopropyl-2H-pyridazin-3-one, 5,6-bis(4-methoxyphenyl)-
6 2-isobutyl-2H-pyridazin-3-one, 2-allyl-5,6-bis(4-
7 methoxyphenyl)-2H-pyridazin-3-one, 5,6-bis(4-methoxy-
8 phenyl)-2-cyclopropyl-2H-pyridazin-3-one, 5,6-bis(4-
9 methoxyphenyl)-2-cyclopropylmethyl-2H-pyridazin-3-one,
10 5,6-bis(4-methoxyphenyl)-2-cyclopropylmethyl-2H-
11 pyridazine-3-thione, 5,6-bis(4-methoxyphenyl)-2-
12 cyclopentyl-2H-pyridazin-3-one, 5,6-bis(4-methoxy-
13 phenyl)-2-cyclopentylmethyl-2H-pyridazin-3-one, 5,6-
14 bis(4-methoxyphenyl)-2-(4-chlorocinnamyl)-2H-pyridazin-
15 3-one, 5-(4-chlorophenyl)-6-(4-methylthiophenyl)-2-
16 benzyl-2H-pyridazin-3-one, 5,6-bis(4-methoxyphenyl)-2-
17 benzyl-2H-pyridazine-3-thione, or 5,6-bis(3-fluoro-4-
18 methoxyphenyl)-2-ethyl-2H-pyridazin-3-one; or a salt
19 thereof.

1 6. A medicine comprising, as an effective in-
2 gredient, a pyridazine derivative or a salt thereof ac-
3 cording to any one of claims 1-5.

1 7. A medicine according to claim 6, which is an
2 interleukin-1 β production inhibitor.

1 8. A medicine according to claim 6, which is a

2 preventive or therapeutic for a disease caused by
3 stimulation of interleukin-1 β production.

1 9. A medicine according to claim 6, which is a
2 preventive or therapeutic for an immune system disease,
3 an inflammatory disease, an ischemic disease, osteo-
4 porosis or ichorrhemia.

1 10. A medicine according to claim 6, which is a
2 preventive or therapeutic for rheumatism, arthritis or
3 inflammatory colitis.

1 11. An interleukin-1 β production inhibitor com-
2 prising, as an effective ingredient, a pyridazine
3 derivative or a salt thereof according to any one of
4 claims 1-5.

1 12. A pharmaceutical composition comprising a
2 pyridazine derivative or a salt thereof according to
3 any one of claims 1-5 and a pharmaceutically acceptable
4 carrier.

1 13. Use of a pyridazine derivative or a salt
2 thereof according to any one of claims 1-5 as a medi-
3 cine.

1 14. A method for the treatment of a disease
2 caused by stimulation of interleukin-1 β production,
3 which comprises administering a pyridazine derivative
4 or a salt thereof according to any one of claims 1-5.